

Appln. No. 10/705,709

Attorney Docket No. 10842-024

**II. Remarks**

Claims 1-22 remain pending in the present application. Further review and examination of this application in view of the following remarks is herein respectfully requested.

**Rejections Under 35 U.S.C. §103(a) – Part One**

Claims 1-11 and 13-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over British Patent no. GB 1,066,251, issued to Anderson (Anderson). The Examiner states: "... in order to insure a proper fit, it would have been obvious for one of ordinary skill in the art to modify Anderson by tapering the inclined retainer surface, since such is well known by one skilled in the art.", and "...the exact angle of inclination would depend on several factors such as the size of the bit and the desired force fit."

The Applicant asserts that the Examiner has not established a prima facie case of obviousness. Specifically, there is no teaching, suggestion, or incentive within Anderson supporting a modification of Anderson in this way.

Referring to Anderson, the purpose of the notch 15 formed within the shank 6 of the pick 7, is to allow the lower edge portion 14 of the rod 11 to engage the pick 7, thereby preventing the pick 7 from being removed from the passage 4 formed within the body 1. The detent 18 holds the rod 11 in position with the lower edge portion 14 engaged therein such that the pick 7 cannot be removed from the passage 4 within the body 1, unless the rod 11 is rotated against the force of the detent 18 to pull the lower edge portion 14 away from the notch 15. The lower edge portion 14 does not actually exert a force onto the pick 7. The lower edge portion 14 simply

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occupies a space such that if the pick 7 is pulled upward in an attempt to remove the pick 7 from the passage 4, the notch 15 will hit the lower edge portion 14 and prevent the pick 7 from being pulled any further. The inclined surface of the notch 15 is angled along the longitudinal axis of the pick 7. Tapering the inclined surface of the notch 15 in any other additional direction would decrease the amount of surface to surface contact between the notch 15 and the lower edge portion 14 of the rod 11, thereby lessening the resistance to removal of the pick 7 from the passage 4. This modification of Anderson destroys the intent, purpose, and function of the device disclosed in Anderson.

Furthermore, the Applicants argue that the present invention is not obvious in light of Anderson, since modifying Anderson to include the tapered, inclined surface would not achieve the same purpose as the present invention. Referring to Paragraph [0032] of the present application:

"A lower surface 46 of the cutting tool 10 is provided for interaction with a retainer such as retainer 14. The lower surface 46 is generally planar and tapered so that the surface 46 is obliquely inclined to face laterally and upwardly."

Now, referring to paragraph [0033] of the present application:

"With the angle of inclination  $\alpha$  of surface 44 on retainer 14 closely matching the lateral angle  $\delta$  of the tapered surface 46, the surfaces 44 and 46 tend toward sliding contact with each other as the tension element 48 is tightened. Any misalignment between the surfaces 44 and 46 causes the retainer 14 to rotate slightly within opening 32 to align with or conform to the vertical angle  $\beta$  of the tapered surface 46 so that the tapered surface 44 on retainer 14 causes a downward and laterally inward force to be applied to a lower end of the bit 10. The pressure generated by the tension element 48 acts to hold the lower end 90 of the cutting bit 10 in firm contact with the bottom surface 76 of the tool holder 12."

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The tapered surface of the notch 15 in Anderson is inclined to face downward, rather than "obliquely inclined to face laterally and upwardly" as required in claim 1 of the present application. Therefore, any contact or force exerted on the pick 7 by the rod 11 would act to push the pick 7 of Anderson upward, rather than downward into the passage 4. The interaction of the notch 15 and the lower edge portion 14 of the rod 11 will act to prevent the pick 7 from being removed from the passage 4, but does not provide "a downward and laterally inward force" such as that provided by the planar and tapered surface 46 of the present invention.

The problem that the present invention solves is to provide a force to keep the cutting tool 10 pushed downward against the bottom surface 76 of the tool holder 12, while simultaneously pushing the cutting tool 10 laterally inward within the slot 30 of the tool holder 12. Referring again to paragraph [0033]:

"The pressure generated by the tension element 48 acts to hold the lower end 90 of the cutting bit 10 in firm contact with the bottom surface 76 of the tool holder 12. This firm contact together with the retention forces applied by fastener 56 greatly inhibit any relative movement between the cutting bit 10 and the tool holder 12 during operation of the cutting tool, thereby prolonging the life of the cutting bit 10 and holder 12 by avoiding abrasively enhanced relative movement."

The Examiner states that "...the exact angle of inclination would depend on several factors such as the size of the bit and the desired force fit.", however, the device disclosed in Anderson does not use a force fit. The pick 7 is held within the passage 4 by engagement of the lower edge portion 14 of the rod 11 and the notch 15 formed within the pick 7. Referring to lines 47-54 of page 3 of Anderson:

"When the notch 15 on the shank 6 comes into alignment with the lower edge portion 14 the rod 11 turn (turns) in the opposite direction under the influence of the resiliently urged detents 18, to cause the lower edge portion 14 to enter into the

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notch 15 thereby securing the shank 6 of the pick 7 in the passage 4."

The rod 11 does not exert any force or pressure onto the pick 7 to keep the pick 7 held securely against any surface within the passage 4. Furthermore, modifying Anderson to include a taper to the inclined surface of the notch 15 would not provide any downward or lateral forces on the pick 7 to achieve this. Therefore, the Applicant asserts that there would be no technological motivation for modifying Anderson in this way.

Therefore, the Applicant asserts that the Examiner has not established a proper prima facie case of obviousness. Accordingly, the Applicant respectfully requests that the Examiner reconsider and withdraw these rejections under 35 U.S.C. §103(a).

**Rejections Under 35 U.S.C. §103(a) – Part Two**

Claims 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson in view of United States Patent No. 3,321,145 issued to Gorman (Gorman). In light of the comments made above, the Applicants assert that independent claim 1 is allowable, and that claim 12 is allowable as depending, either directly or indirectly, from allowable independent claim 1. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw this rejection under 35 U.S.C. §103(a).

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**Conclusion**

The Applicants assert that pending Claims 1-22 are patentable. Applicants respectfully request the Examiner grant allowance of these claims. The Examiner is invited to contact the undersigned attorneys for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,

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